UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,803	11/07/2001	Fernand Labrie	P/1259-637	3989

2352 7590 12/28/2006
OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER	
CHONG, YONG SOO	
ART UNIT	**PAPER NUMBER**
1617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/052,803	LABRIE, FERNAND	
	Examiner	Art Unit	
	Yong S. Chong	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,13-19,22-24,35-41 and 44* is/are pending in the application.

4a) Of the above claim(s) *24 and 44* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,13-19,22,23 and 35-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/30/06, 5/2/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/2006 has been entered.

Claim(s) 3-12, 20-21, 25-34, 42-43 have been cancelled. Claim(s) 1-2, 13-19, 22-24, 35-41, 44 are pending. Claim(s) 24 and 44 have been withdrawn. Claim(s) 1 and 22 have been amended. Claim(s) 1-2, 13-19, 22-23, 35-41 are examined herein.

Applicant's arguments have been fully considered but found not persuasive to withdraw the rejections. The rest of the rejections of the last Office Action are maintained for reasons of record and repeated below for Applicant's convenience.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Simard et al. (International Journal of Cancer (1997), 73(1), 104-112, "83" in PTO-1449

submitted November 7, 2001) for reasons of record stated in the Office Action dated February 8, 2005.

Simard et al. discloses a composition comprising 1713-estradiol (E2), the instant estrogen, and a simultanoues incubation with EM-652 or EM-800, the instant SERM compound, and a pharmaceutical diluent or carrier such as ethanol and water in vitro. See abstract, page 104-105; Fig 2-12 at page 106-111. Thus, the testing results show that EM-652 or EM-800 as non-steroidal antiestrogens are useful in treating breast cancer in patients (see abstract), particularly including those woman patients who need to take estrogens daily for hormone replacement therapy (HRT).

Claims 1-2 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Couillard et al. ("8" in PTO-1449 submitted November 1,2004) for reasons of record stated in the Office Action dated February 8, 2005.

Couillard et al. discloses that administering estrone, the instant estrogen, to mice while co-administering EM-800 and DHEA in a composition with a pharmaceutical diluent or carrier, is useful in inhibiting breast tumors or cancer growth in mice.

Response to Arguments

Applicant argues that the Simard reference does not disclose a pharmaceutically acceptable excipient, diluent, or carrier. This is not persuasive because Simard clearly disclose ethanol as a pharmaceutical carrier (pg. 105, right col. 2nd paragraph), therefore rendering the composition in a finished form suitable for administration to a patient. With regard to the Couillard reference, Examiner notes that once the active

agents are administered to a patient, the composition is in contact with water in the blood.

Examiner also notes that the claim limitation regarding "in finished form suitable for administering to a patient" will be given little patentable weight as it is considered preamble to a composition claim.

It is respectfully pointed out that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish from each other. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Thus, the intended use of a composition claim will be given no patentable weight.

It is further respectfully pointed out that a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). See MPEP 2111.02.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham vs John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 17-19, 22-23, and 35-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simard et al. or Couillard et al. for reasons of record stated in the Office Action dated February 8, 2005.

The same disclosure of Simard et al. or Couillard et al. has been discussed in the 102(b) rejection set forth above.

The prior art does not expressly disclose the employment of a kit to store the compositions of Simard et al. or Couillard et al. The prior art does not expressly disclose the employment of the known pharmaceutically acceptable salt of the acid in a pharmaceutical composition or a kit.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ a kit for comprising the composition of Simard et al. or

Couillard et al. and to employ the known pharmaceutically acceptable salt of the acid in a pharmaceutical composition or a kit, since the patient pack or kit and the pharmaceutically acceptable salts are all deemed obvious; they are all within the knowledge and conventional skills of pharmacologist to conveniently assist the user and prescriber for easy dispensary of the medication.

Claims 1-2, 13-19, 22-23, and 35-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo et al. ("54", PTO-1449 submitted November 7, 2001) and Barrett-Connor et al. ("4", PTO-1449 submitted November 7, 2001), and Do Nascimento (of record) in view of Labrie et al. (WO 96/26201, PTO-1449 submitted November 7, 2001), for the same reasons of record in the Office Action dated February 8, 2()05. Luo et al. discloses that an estro.qen, DHEA alone, or the particular SERM (antiestrogen), EM-800 alone (having 2S configuration and moieties convertible in vivo to hydroxyl), is known to be useful in a method of treating hyperlipidemia by decreasing serum lipid levels such as triglyceride and cholesterol levels. See abstract and page 4436 Fig. 1 "Structure of EM-800", page 4438 the left column "Effect on serum lipid levels". Luo et al. further discloses that the combination of DHEA and EM-800 exerts more potent effect on reducing serum lipid levels than each compound used alone (page 4438 the left column "Effect on serum lipid levels" and page 4439 Fig. 4, and page 4443 the left column.

Barrett-Connor et al. teaches that SERMs are capable of lowering serum lipid levels to reduce the risk of coronary heart disease, as estro.qen does. See abstract.

Do Nascimento teaches that the particular estrogen, 1713-estradiol, is useful in treating hypercholesterolemic patients (see abstract).

The prior art does not expressly disclose the employment of the combination of an estrogen such as 1713-estradiol and the particular SERM, EM-652.HCl, or further combining with DHEA in a pharmaceutical composition.

Labrie et al. (WO 96/26201) discloses that both EM-800 and EM-652 or EM-652.HCl are antiestrogens (SERMs), and EM-800 has moieties convertible in vivo to hydroxyl to become EM-652. Thus, EM-800 is a metabolite of EM-652, having the same functional property and activity.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ of the combination of an estrogen such as 1713-estradiol and the particular SERM, EM-652.HCl, or to further combine with DHEA, in a pharmaceutical composition.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ the combination of an estrogen such as 1713-estradiol and the particular SERM, EM-652.HCl, or to further combine with DHEA, in a pharmaceutical composition, since estrogens such as 1713-estradiol and DHEA are well known in the art to be used in methods of treating hyperlipidemia by decreasing serum lipid levels such as triglyceride and cholesterol levels according to the cited prior art herein. Moreover, the particular SERM, EM-800, a known metabolite of EM-652 (convertible in vivo to hydroxyl to become EM-652), alone or in combination with an estrogen such as DHEA, is known to be useful in a method of treating_hyperlipidemia

by decreasing serum lipid levels such as triglyceride and cholesterol levels according to Luo et al.

Therefore, one of ordinary skill in the art would have reasonably expected that combining an estrogen such as 1713-estradiol and the particular SERM, EM-652.HCl, or further combining with DHEA, all known useful for the same. purpose, i.e., treating hypercholesterolemia, would improve the therapeutic effects for treating the same disorder, hypercholesterolemia, and/or would produce additive therapeutic effects in treating the same. See In re Kerkhoven, 205 USPQ 1069 (CCPA 1980) regarding combination inventions. It is considered prima facie obvious to combine two active composition components into a single composition to form a third composition useful for the very same purpose.

Further, the teachings of Luo et al. that the combination of DHEA and EM-800 exerts more potent effect on reducing serumlipid levels than each compound used alone clearly provides the motivation of the instant claimed method employing the combination of EM-652, 17~-estradiol and DHEA.

Furthermore, one of ordinary skill in the art would have been motivated to prepare a kit comprising the same composition because the preparation of a kit comprising a pharmaceutical composition is considered well in the competence level of an ordinary skilled artisan in pharmaceutical science, involving merely routine skill in the art.

Thus the claimed invention as a whole is clearly prima facie obvious over the teachings of the prior art.

Response to Arguments

Applicant argues that "both Simard and Couillard teach aqainst estrogen. Couillard notes at abstract lines 6-7, "Estrone caused a 10-fold increase in ZR-75-1 tumor area..." ZR-75-1 is defined as human mammary tumor. Likewise, Simard states that estrogens play a predominant role in the development and growth of human breast cancer..." (Abstract, lines 1-2).

Applicant's argument is not found persuasive. Since first, the instant claims are directed to a pharmaceutical composition, which is a product claim not method claim. Thus, so long as Simard et al. discloses a composition comprising 17~-estradiol (E2), the instant estrogen, and a simultanoues incubation with EM-652 or EM-800, the instant SERM compound, and a pharmaceutical diluent or carrier such as water in vitro, or Couillard et al. discloses that administering estrone, the instant estrogen, to mice while co-administering EM-800 and DHEA in a composition with a pharmaceutical diluent or carrier, the prior art anticipates the claimed composition.

Second, as set forth in MPEP 2131.05, "Argument that the alleged anticipatory prior art is 'nonanalogous art' or 'teaches away from the invention' or is not recognized as solving the problem solved by the claimed invention, [are] not 'germane' to a rejection under section 102" (see also Twin Disc. Inc. V. United States, 231 USPQ 417, 424 (Cl.Ct. 1986). The question whether a reference "teach away" from the invention is inapplicable to an anticipation analysis (see also Celeritas Technologies Ltd v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fde. Cir. 1999).

Thus, in this case, Applicant's argument that "both Simard and Couillard teach aqainst estrogen" is not germane to the 102 rejections herein.

Applicant argues that Luo does not disclose an estrogen. This is not persuasive because Luo clearly discloses estrogens.

Applicant also argues that Barrett-Conner does not test the presently-claimed SERMs on cholesterol. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., testing of the presently-claimed SERMs on cholesterol) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong S. Chong whose telephone number is (571)-272-8513. The examiner can normally be reached on M-F, 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SREENI PADMANABHAN can be reached on (571)-272-0629. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YSC

SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER